

Preparing for Your VEX AIM Activity

What Do I Need to Set Up this Activity?

Materials needed for each group (recommended group size is two students):

- Student Handout
- [VEX AIM Kit](#) with a:
 - [Charged VEX AIM Robot](#)
 - [Charged One-Stick Controller](#)
- VEX AIM Field with walls (two groups can share one field if needed)
- Tape and/or wet erase markers and a damp cloth (for marking locations on the field)
- Certificates for each participant

See the Activity Notes for activity-specific preparation information.

Resources to Help You Get Started with VEX AIM

If you are not already familiar with VEX AIM, use the following articles to help you get started driving:

- [Charging and Powering On VEX AIM](#)
- [Charging and Powering the One Stick Controller](#)
- [Using Drive Mode on VEX AIM](#)

For additional support and troubleshooting, use these articles:

- [Connecting the One Stick Controller to VEX AIM](#)
- [Updating VEX AIM's Firmware](#)

If you are going to be coding with VEX AIM, use the following articles to help you get started coding:

- [Using Button Coding with VEX AIM](#)
- [Accessing VEXcode AIM](#)
- [Connecting Your Robot to VEXcode AIM - Wireless](#)
- [Downloading, Running, and Stopping a VEXcode AIM Project](#)
- [Creating, Opening, and Saving a VEXcode AIM Project](#)

Leading Your VEX AIM Activity

All VEX AIM Girl Powered Activities follow the same structure.

1. **Introduction** – Set the stage for the activity by reading the context in the Activity Notes.
2. **Hands-on Activity** – Follow the steps in the Activity Notes to facilitate the hands-on portion of the activity.
 - a. Project or give students the Student Handout to reference as they are practicing.
 - b. Students should work collaboratively throughout the activity.
 - c. Walk around the room to help students with activity tasks and to talk with them about what they are doing and learning.
 - d. The goal of Girl Powered activities is to get students excited about STEM and robotics – not mastery of a concept or task.
3. **Wrap-up** – Come back together as a whole group for a brief discussion and celebration of learning.

Wrapping Up Your VEX AIM Activity

After your students have completed the activity, wrap up the experience with a brief discussion.

- **For a strategy-focused discussion**, compare driving or coding strategies to see how students approached the same challenge in different ways. Ask questions like:
 - How is this approach similar or different to yours?
 - What is something that surprised you about driving or coding the robot?
 - What is another way this group could have completed the challenge?
- **For a collaboration-focused discussion**, talk about how students worked together. Ask questions like:
 - What is one way you helped your partner?
 - What is something you learned from your partner today?
 - What was your favorite part of working with your partner?
- If you have a guest speaker, have them reflect on how this activity connects to their STEM experiences, and share that with the group.

Allow time for cleaning up.

- Have students clean off their fields, and replace all cargo, robots, controllers, and AprilTag IDs in their AIM Kits.

Celebrate Success!

After the activity has ended, celebrate with your students!

- **Distribute certificates to all workshop participants.** Add their names and the date, and any other details you would like to celebrate.
- **Share photos or videos of students with their certificates or robots!** Explain what makes that moment meaningful to you or the student(s). Tag your posts with **#GirlPowered** and **#WhyIAmGirlPowered** so others can celebrate with you!